

IN THE CLAIMS

Please amend the claims to read as follows:

Listing of Claims

1-22. (canceled)

23. (Currently Amended) A method for performing a scheduling algorithm with minimum resource scheduling in a mobile communication system, comprising ~~the steps of:~~
scheduling allocation units for a user or service ~~in~~ on a per-scheduling frame basis,
wherein each scheduling frame comprises a plurality of allocation units,
checking whether the allocation units that are scheduled for a the user or service in a
~~particular current~~ scheduling frame meet at least one resource constraint, ~~and~~
releasing the allocation units that are scheduled for a the user or service for said current
~~that particular scheduling frame based on~~ in response to a the result of ~~the~~ checking whether the
allocation units that are scheduled for the user or service in said current scheduling frame meet
the at least one resource constraint, and ~~step for the resource constraint~~
re-scheduling the released allocation units in the current scheduling frame to at least one
other user or service.

24. (Currently Amended) The method according to claim 23, wherein the scheduling
comprises ~~step includes~~ considering at least one of ~~the following scheduling parameters a~~
channel condition parameter, an amount of data available for transmission to a specific user, a
quality of service, a delay, a data rate and a carrier to interference ratio.

25. (Previously Presented) The method according to claim 23, wherein the scheduling frame has at least one of a time division, frequency division or code division frame structure.

26. (Currently Amended) The method according to claim 23, wherein the at least one resource constraint is a user or service based requirement.

27. (Currently Amended) The method according to claim 23, wherein the at least one resource constraint is a scheduling frame based requirement.

28. (Currently Amended) The method according to claim 23, wherein the at least one resource constraint is defined based on a proportion of ~~the~~ available scheduling frame resources.

29. (Currently Amended) The method according to claim 23, wherein the at least one resource constraint is represented by a minimum number of scheduled allocation units for the user or service.

30. (Currently Amended) The method according to claim 23, wherein the allocation units have a quantity of one of transmittable information bits, Internet Protocol ~~internet protocol~~ packets, code blocks or modulation symbols.

31. (Currently Amended) The method according to claim 23, further comprising: ~~the step~~
of

checking whether at least one other resource constraint is not violated by releasing the allocation units, and

releasing the allocation units that are scheduled for a the user or service only if the at least one other resource constraint is not violated by such release.

32. (Currently Amended) The method according to claim 31, wherein the checking of whether the step of determining the violation of at least one other constraint is violated comprises determining a quality of service parameter such as a maximum allowable delay or long-term data rate.

33. (Cancelled)

34. (Currently Amended) The method according to claim 23, further comprising ~~the step~~ of signaling to the user the result of the scheduling algorithm, including in particular whether the allocation units are released.

35. (Currently Amended) The method according to claim 34, wherein the signaling is transmitted on ~~in~~ an associated control channel.

36. (Currently Amended) The method according to claim 23, wherein the ~~steps of~~ checking and the releasing of the allocation units are carried out in a time sequential manner for ~~all users or services by the scheduling algorithm for all users or services are carried out in a time sequential manner.~~

37. (Currently Amended) A scheduling apparatus for use scheduler in a mobile communication system and for performing a scheduling algorithm with minimum resource scheduling, comprising:

a scheduling unit for scheduling allocation units for a user or service ~~in~~ on a per- scheduling frame basis, wherein each scheduling frame comprises a plurality of allocation units,

a checking unit for checking whether the allocation units that are scheduled for a the user or service in a current ~~particular~~ scheduling frame meet at least one resource constraint; and for providing a result of the checking, and

a releasing unit for releasing the allocation units that are scheduled for the a user or service for the current ~~that particular~~ scheduling frame in response to ~~based on~~ the result provided by the checking unit, ~~means for checking the resource constraint.~~

wherein the scheduling unit is configured to re-schedule the released allocation units in the current scheduling frame to at least one other user or service.

38. (Currently Amended) The scheduling apparatus scheduler according to claim 37, further comprising a determining unit for determining whether at least one other resource constraint is not violated by releasing the allocation units and for releasing the allocation units that are scheduled for a the user or service only if the at least one other resource constraint is not violated by such release.

39. (Currently Amended) The scheduling apparatus scheduler according to claim 37, further comprising a signaling unit for signaling to the user the result of the scheduling algorithm, including in particular whether the allocation units are released.

40. (Cancelled)

41. (Currently Amended) A base station comprising a scheduling apparatus scheduler according to claim 37.

42. (Currently Amended) A mobile terminal comprising a scheduling apparatus scheduler according to claim 37.

43. (Currently Amended) A mobile communication system comprising a transmitter and a scheduling apparatus scheduler according to claim 37 and a receiver, the receiver further comprising a processing unit for processing information on the result of the scheduling algorithm, and

a control unit for shutting down at least part of its the mobile communication system's receiving circuitry for the duration of a scheduling frame for which no allocation units are scheduled to the receiver.

44. (Currently Amended) A mobile communication system comprising a scheduling apparatus scheduler according to claim 37 and a transmitter, the transmitter further comprising a processing unit for processing information on the result of the scheduling algorithm, and

a control unit for shutting down at least part of its the mobile communication system's transmitting circuitry for the duration of a scheduling frame for which no allocation units are scheduled to the transmitter.

45. (Currently Amended) The scheduling apparatus scheduler according to claim 38, further comprising a signaling unit for signaling to the user the result of the scheduling algorithm, in particular whether allocation units are released.